

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
X	X	X	X	X	X

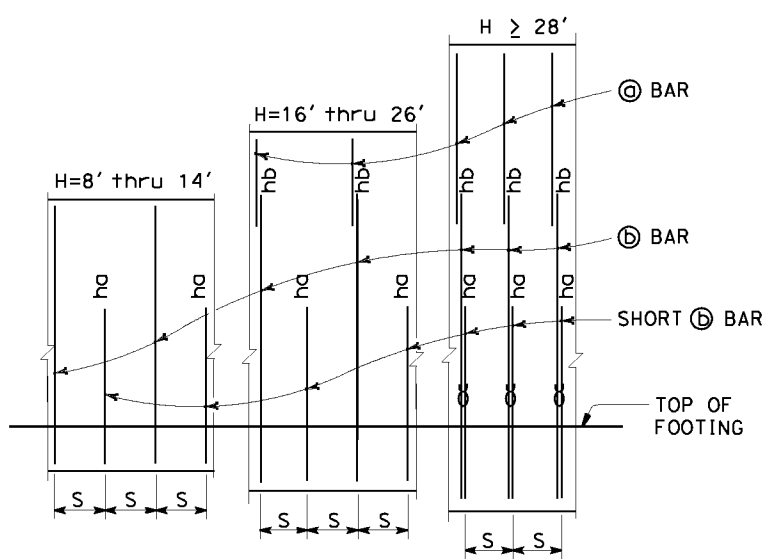
  

REGISTERED CIVIL ENGINEER	X	DATE
PLANS APPROVAL DATE		

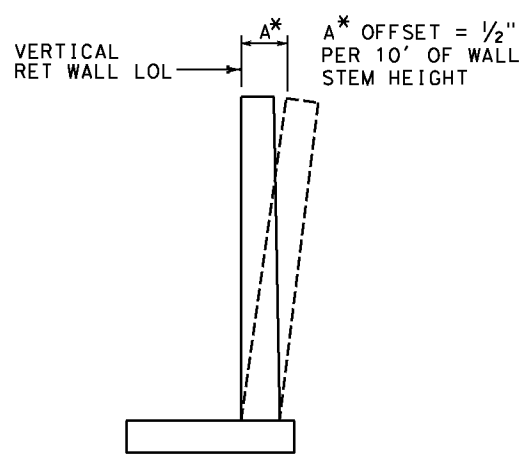
REGISTERED PROFESSIONAL ENGINEER	X
No.	X
Exp.	X
CIVIL	

*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*



**ELEVATION**  
No Scale

NOTES:  
 "ha", "hb" above ⊕ bars indicate distance from top of footing to upper end of ⊕ bars, see table.  
 "S" is ⊕ bar spacing, see table.



**WALL OFFSET**  
No Scale

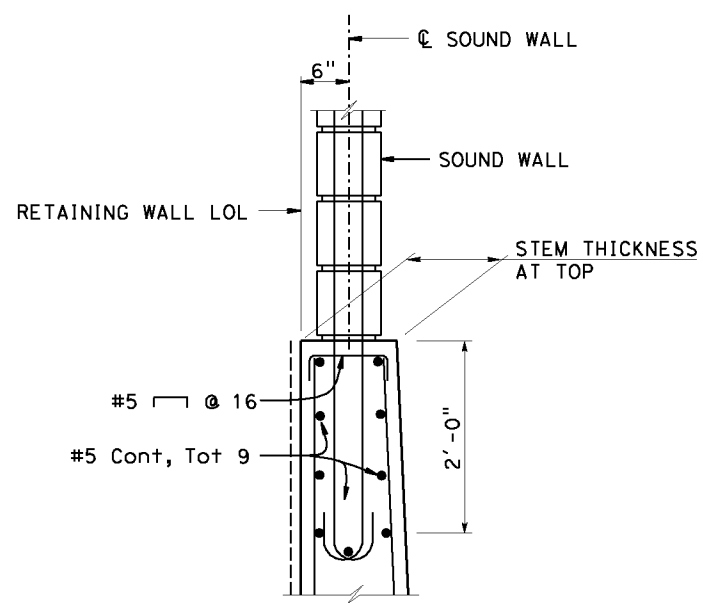
Values for offsetting forms to be determined by the Engineer

**DESIGN DATA**

Design: AASHTO LRFD Bridge Design Specifications, 4th edition with California Amendments  
 WS: 33 psf on Sound wall  
 LS: Varied surcharge on level ground surface  
 EQE: Mononobe-Okabe Method  
 $K_h = 0.3$   
 $K_v = 0.0$   
 Soil:  $\phi = 34^\circ$   
 $\gamma = 120$  pcf  
 Reinforced Concrete:  $f'_c = 3600$  psi  
 $f_y = 60,000$  psi

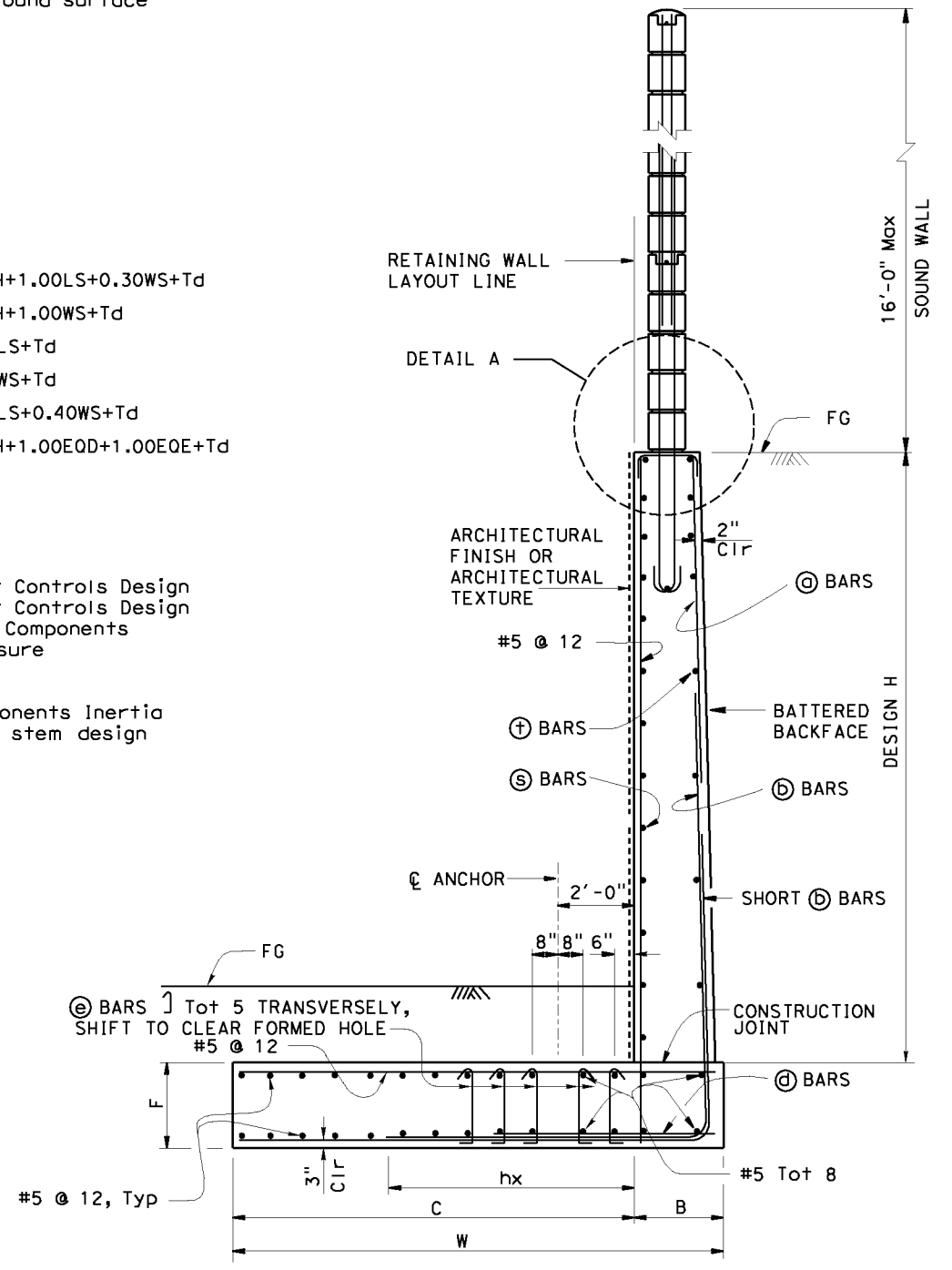
Load Combinations and Limit States  
 Service I  $Q = 1.00DC + 1.00EV + 1.00EH + 1.00LS + 0.30WS + T_d$   
 Service II  $Q = 1.00DC + 1.00EV + 1.00EH + 1.00WS + T_d$   
 Strength I  $Q = aDC + \beta EV + 1.50EH + 1.75LS + T_d$   
 Strength III  $Q = aDC + \beta EV + 1.50EH + 1.40WS + T_d$   
 Strength V  $Q = aDC + \beta EV + 1.50EH + 1.35LS + 0.40WS + T_d$   
 Extreme I  $Q = 1.00DC + 1.00EV + 1.00EH + 1.00EQD + 1.00EQE + T_d$

Where: Q: Force Effects  
 a: 1.25 or 0.90, Which ever Controls Design  
 B: 1.35 or 1.00, which ever Controls Design  
 DC: Dead Load of Structure Components  
 EV: Vertical Earth Fill Pressure  
 LS: Live Load Surcharge  
 EQE: Seismic Earth Pressure  
 EQD: Soil and Structure Components Inertia  
 Soil inertia ignored for stem design  
 WS: Wind Load on Sound wall  
 Td: Anchor Design Load



**DETAIL A**  
1" = 1'-0"

- NOTES:
- For Sound wall and Retaining wall Architectural finish or texture see Details elsewhere in Project Plans
  - For Details not shown and Drainage Notes see (3-5)
  - Footing cover, 2'-0" minimum.
  - For Sound wall reinforcement details, see "SOUND WALL - MASONRY BLOCK ON RETAINING WALL" sheet.
  - Shift ⊕ bars and ⊙ bars as required to clear formed hole for ground anchor.
  - Footing is designed to resist 1.33 Td assuming the maximum anchor spacing shown in the table.



**SPREAD FOOTING SECTION**  
No Scale

STANDARD DRAWING		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO. X		X	
FILE NO. xs14-380-1	APPROVAL DATE July 2011	DEPARTMENT OF TRANSPORTATION		PROJECT NUMBER & PHASE: X		POST MILE X		RETAINING WALL TYPE 7SW - DETAILS NO.1	
DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. [02-02-11])		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: X		CONTRACT NO.: X		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
		0 1 2 3		FILE => #REQUEST				REVISION DATES SHEET OF X X	